Bullying and the need to belong: Early adolescents' bullying-related behavior and the acceptance they desire and receive from particular classmates

Olthof, T.; Goossens, F.A.

published in
Social Development
2008

DOI (link to publisher)
10.1111/j.1467-9507.2007.00413.x

document version
Publisher's PDF, also known as Version of record

doi: 10.1111/j.1467-9507.2007.00413.x

Bullying and the Need to Belong: Early Adolescents' Bullying-Related Behavior and the Acceptance they Desire and Receive from Particular Classmates

Tjeert Olthof, *Department of Developmental Psychology* and
Frits A. Goossens, *Department of Special Education, VU University Amsterdam*

Abstract

Based on the notion that one of the motives underlying children's antisocial behavior is their need to belong to particular peers, it was examined how each of four types of bullying-related behavior would be related to the acceptance that 10 to 13-year-old children desired and received from same- and other-sex children with different bullying-related behavioral styles. Bullying-related behavior was assessed using a peer nomination procedure. Children rated the importance of being accepted by each particular classmate and their own acceptance of these same classmates. Among boys, antisocial involvement in bullying was related to a desire to be accepted by other antisocial boys and to actually being rejected by boys in general. Among girls, antisocial involvement in bullying was related to a desire to be accepted by boys in general.

Keywords: bullying; group processes; desired acceptance; rejection

Introduction

Since Olweus' (1978) seminal work in the 1970s, our knowledge of bullying has increased tremendously. It has become clear that childhood bullying behavior and being victimized are both predictors of serious maladjustment at a later age (Hawker & Boulton, 2000; Loeber & Dishion, 1983; Rigby, 2002). Much has also become known about the behavioral and intra-psychic correlates of bullying and of being victimized (Camodeca & Goossens, 2005; Camodeca, Goossens, Meerum Terwogt, & Schuengel, 2002; Camodeca, Goossens, Schuengel, & Meerum Terwogt, 2003) and about the adaptive and maladaptive effects of particular emotional and behavioral responses to being victimized (Kochenderfer & Ladd, 1997; Kochenderfer-Ladd, 2004; Kochenderfer-Ladd & Skinner, 2002; Perry, Willard & Perry, 1990). In addition, the work of Salmivalli, Lagerspetz, Björkqvist, Österman, and Kaukiainen (1996) and of Hawkins, Pepler, and Craig (2001) has made clear that there are

Correspondence should be addressed to Tjeert Olthof, Department of Developmental Psychology, VU University Amsterdam, Van der Boechorststraat 1, 1081 BT, Amsterdam, the Netherlands. Email: *T.Olthof@psy.vu.nl*

different types of non-bullying behavior that nevertheless affect both whether or not bullying occurs in a classroom and how serious its consequences are, that is, (1) actively avoiding all involvement in bullying (*outsider behavior*); (2) providing help to victims (*defending*), and (3) providing bullies with an approving audience even when not participating oneself (*reinforcing*). Salmivalli et al. (1996) also distinguished between two highly correlated, but distinguishable types of bullying behavior, that is, *initiating* acts of bullying vs. *assisting or following* a leading bully. These findings have been replicated repeatedly and they have led researchers to infer that bullying is a group process (Goossens, Olthof, & Dekker, 2006; O'Connell, Pepler, & Craig, 1999; Salmivalli et al., 1996; Salmivalli, Lappalainen, & Lagerspetz, 1998; Sutton & Smith, 1999).

The latter claim raises the issue of the nature of the peer group dynamics and corresponding motivational processes that support the different types of bullying behavior that have been identified. Unfortunately, few studies have focused on such processes, the only exception being ethologically oriented studies in which bullying is explained in terms of children's striving for dominance in their peer group (Pellegrini, 2002; Pellegrini & Bartini, 2001). Particularly wanting is empirical work examining how individual differences in conformity and susceptibility to peer influence affect children's antisocial behavior (Hartup, 2005). The general aim of the present study is to contribute to our understanding of such phenomena by examining an under-researched type of motive that might underlie early adolescents' bullying behavior, that is, their need to be accepted by particular classmates. Specifically, we hypothesize that children's bullying behavior is partly motivated by their desire to be accepted by other bullying children and by members of the other sex.

In both general psychological (Maslow, 1970) and sociological (Honneth, 1995) theorizing, it has been proposed that one of the basic motives underlying human behavior is a need to be accepted and recognized by others. In the same vein, Baumeister and Leary (1995) reviewed a wealth of evidence supporting their claim that 'human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting positive and significant interpersonal relationships' (Baumeister & Leary, 1995, p. 497). In the present study we propose that this *need to belong* also manifests itself among children who are confined to spend much of their time together at school. Specifically, we propose that children have a need to be accepted by at least some classmates and that this need constitutes one of the motives underlying their behavior.

Baumeister and Leary (1995) argued that the need to belong motivates a wide array of interpersonal behaviors, one of these being antisocial behavior. Specifically, even though behaving in antisocial ways is likely to alienate the victims of that behavior, it might well facilitate being accepted by antisocial peers (Baumeister & Leary, 1995, p. 521). Accordingly, as a motive for antisocial behavior, the need to belong is likely to manifest itself as a desire to be accepted by individuals who behave antisocially themselves, while at the same time being accompanied by a lack of desire to be accepted by particular other individuals, that is, the victims of one's behavior and possibly also others who reject the use of antisocial strategies.

In the bullying literature, the notion that antisocial behavior can be motivated by a desire to be accepted by others who behave antisocially themselves is implied in the use of the label *follower* for children who assist a leading bully. There is also some empirical support for the suggestion that bullying may arise from a desire to be accepted by other bullying children, in that some bullies have been found to acknowledge that they participated in bullying because they did not want to be left out (Owens,

Shute, & Slee, 2003, p. 80). When taken together, it seems reasonable to suggest that bullying is at least partly motivated by a desire to be accepted by other bullying children and that it is accompanied by a lack of such a desire with respect to victims, outsiders, and defenders.

The notion that some children's desire to be accepted by bullies motivates them to behave in a similar way as those they desire to be accepted by implies that these children implicitly or explicitly assume the validity of another hypothesis, that is, that behaving in a similar way as someone else will increase one's chances of being accepted by that other person. This assumption is in agreement with psychological theories claiming that interpersonal attraction results from similarity in attitudes and behavior (Byrne, Clore, & Smeaton, 1986). Supportive evidence for such a *homophily* effect in the domain of bullying and aggression comes from studies indicating that children who are nominated as friends by their peers are similar in terms of their role in bullying (Salmivalli, Huttunen, & Lagerspetz, 1997) and that children who hang out together are similar in terms of aggression (Cairns, Cairns, Neckerman, Gest, & Gariepy, 1988; Farmer, Leung, Pearl, Rodkin, Cadwallader, & Van Acker, 2002; Poulin & Boivin, 2000). Note, however, that although these studies do suggest that children who accept each other are behaviorally similar, they do not necessarily indicate that the reverse relation is also true, that is, that behaviorally similar children accept each other. This doubt is reinforced by findings in the peer group formation literature that one reason for aggressive children to flock together is being rejected by non-aggressive children, rather than being accepted by similarly aggressive children (Hektner, August, & Realmuto, 2000).

When taken together, our motivational account implies that bullying children's desire to be accepted by other bullying children motivates them to behave as a bully, and that the resulting behavioral similarity might or might not lead the other bullying children to actually accept them. To address these issues, we will not only examine whether or not children's bullying behavior is positively related to their desire to be accepted by other bullies, but also whether or not such behavior is related to actually being accepted by behaviorally similar children. Our motivational account suggests that the acceptance that children desire from bullies—unlike the acceptance desired from victims, outsiders, and defenders—explains variance in their own bullying behavior over and above the variance that is explained by the acceptance that they actually receive from these same children. This is the first hypothesis to be tested.

In addition to suggesting that the need to belong might motivate antisocial behavior, Baumeister and Leary (1995) made a further intriguing suggestion, that is, that the need to belong might well be more fundamental than other needs that have figured more prominently in the motivation literature. Specifically, they argued that the need to belong may actually be regarded as a major source of the need for power. This suggestion is in line with claims in the ethological approach to bullying and aggression, that is, that the dominance that bullies—and aggressive children in general—strive for is not an end in itself, but a means to get access to valuable resources, one of these being access to the other sex (Hawley, 2003; Pellegrini, 2002). Based on these ideas, our second hypothesis is that bullying behavior is related to children's desire to be accepted by members of the other sex.

The previous account implies that the predicted relations between children's behavior and the acceptance they desire from particular peers are unique for bullying and following behavior, that is, other bullying-related behaviors should be related differently to the same measures of desired acceptance. To address this issue, we will also

examine how measures of children's outsider and defender behavior and of being victimized are related to the acceptance children desire and receive from classmates with particular bullying-related behavioral styles.

It could be argued that if children's antisocial bullying-related behavior is motivated by a need to be accepted by particular peers, the same might be true for other behaviors as well. This makes sense, but we also believe that non-bullying behaviors are less well suited to examine the unique relations of desired acceptance to behavior. This is because behaviorally similar non-bullying children often are friends (Hodges, Malone, & Perry, 1997; Salmivalli et al., 1997), which suggests that for such children a desire to belong to particular peers is part and parcel of being friends with these same peers. If so, measures of desired acceptance are unlikely to explain much variance in non-bullying behavior over and above the variance that is explained by measures of received acceptance. For this reason we focus on bullying and following behavior to examine the unique relations of desired acceptance to behavior.

To test our hypotheses, 10- to 13-year-old children's desires to be accepted by their classmates were assessed using a new method that was specifically designed for this study, that is, children were asked to rate for each particular classmate how important they considered it to be to be liked by that classmate and how bad they would feel upon noticing that the classmate does not like them. To be able to assess the acceptance that children actually received from their classmates, children were also rated by each classmate in terms of how much they were liked by that classmate.

Children's involvement in bullying was assessed using a peer report procedure that is similar to Salmivalli et al.'s (1996) participant role scale. In this procedure, children are assigned continuous scores of their bullying-related behavior on the basis of how many classmates nominate them in response to items describing that particular type of behavior. In most work using this or related procedures, a set of decision rules is subsequently used to classify children into one of several bullying roles. For two reasons, we refrained from classifying children in the present study. Firstly, although the classification procedure has been very useful in previous research, the decision rules that have been used have varied considerably and the choice for a particular set of rules still is somewhat arbitrary (Goossens et al., 2006). Secondly, any classification procedure necessarily results in ignoring much of the variance in children's behavior scores. In the case of the present study this is particularly bothersome, because any decision about how to classify children not only affects the dependent variables, but the independent variables as well. For example, in the present study an important independent variable is the acceptance that children desire from bullying classmates. One way to construct this variable would be to first classify all classmates in terms of being or not being a bully and to subsequently compute the average of a respondent's ratings of the acceptance that he or she desired from those classmates classified as bullies. However, this procedure would lead one to ignore the variance in bullying behavior both among classmates classified as bullies and among classmates classified as non-bullies. To be able to use all the available variance, we rather preferred to weigh the ratings of how much acceptance a respondent desired from each particular classmate precisely to the extent that the classmate behaved as a bully. Accordingly, children's continuous behavior scores were used as weighting factors when constructing measures of desired and received acceptance, and were also used as the dependent variables.

To test our hypotheses, separate regression analyses for boys and girls will be used to relate children's behavior with regard to their desire to be accepted by same- and

other-sex classmates with particular bullying-related behavioral styles. Gender-specific analyses were used for two reasons. Firstly, gender differences have been found for the types of bullying-related behaviors that are examined in this study (e.g., Salmivalli et al., 1996, 1998; Veenstra, Lindenberg, Oldehinkel, Winter, Verhulst, & Ormel, 2005). For the present study this implies that both the dependent and the independent variables are likely to depend on gender and that gender should be taken into account in the analyses. Secondly, because there is still an almost complete gender segregation among early adolescents (Maccoby, 2000), the possibility should be taken into account that the hypothesized relations between bullying behavior and children's desire to be accepted by other bullying children apply primarily within their own gender group, even though there is no reason to exclude the possibility that the hypothesis also applies across gender groups.

Method

Participants

Participants in this study consisted of 194 boys and 184 girls who were in 15 different classes from six different elementary schools in a medium-sized town in the vicinity of Amsterdam, the Netherlands. The response rate was high in that more than 90 percent of the parents gave permission for their children to participate. The high participation rate is probably due to the active endorsement of the study by all six school directors, and to the fact that the study was about bullying, a topic parents are concerned about.

In the Netherlands, children enter the first grade of elementary school at the age of four and having a successful school career implies that they leave that same school eight years later after having finished grade 8. Six of the present study's 15 classes consisted of only grade-8 children, five classes consisted of only grade-7 children, three classes consisted of both grade-7 and grade-8 children, and one class consisted of both grade-6 and grade-7 children. The mean age of children in each class varied from 10 years and 10 months to 12 years and five months, with an average of 11 years and 10 months for the group as a whole (range is nine years and eight months to 13 years and nine months; *SD* = nine months).

Teachers reported whether or not each of a child's parents was an unskilled laborer, a skilled laborer, a lower employee, a small firm owner, a mid-level employee, or a high-level employee. The percentages of children for whom the job of the highest ranking parent was reported to be in each of these categories were 4, 8, 12, 7, 31, and 16, respectively. For 22 percent of the children, teachers were unable to provide this information. No formal assessment was made of children's ethnic or cultural background, but we nevertheless obtained a tentative indication of children's origins by classifying their first names in two categories, that is, (1) names that are commonly given by parents originating from the Netherlands, and (2) names that are primarily used among immigrants from Morocco, Turkey, or the former Dutch colony of Surinam. Over the six schools the percentage of children with the latter type of names varied from 0 to 17 percent, with an average of 9 percent for the group as a whole.

Measures

Involvement in Bullying. To assess children's involvement in bullying we used the new participant role scale (NPRS) (Goossens et al., 2006), which is a translated and adapted

32-item version of Salmivalli et al.'s (1996) peer nomination procedure. In line with the work of Goossens et al. (2006), we computed scores for each item by dividing the number of classmates who nominated a particular participant for that item by the total number of children who gave nominations. In their longitudinal study, Goossens et al. (2006) subjected such scores to exploratory and confirmatory factor analyses, which led them to delete four items. Results further indicated that the NPRS contains five subscales that were labeled *bully* (six items describing children who have a leading role in bullying, e.g., 'is in charge when someone is bullied and starts bullying'); *follower* (eight items describing children who assist a leading bully or who reinforce participation in bullying, e.g., 'joins when others are bullying and incites bully by shouting'); (3) *outsider* (six items describing children who actively avoid all involvement in bullying, e.g., 'takes care not to get involved' and 'leaves the scene when someone's being bullied'); (4) *defender* (four items describing children who provide support to victims, e.g., 'comforts victim' and 'stays with victim during recess'); and (5) *victim* (four items describing children who are victimized themselves, e.g., 'is laughed at by others' and 'gets bullied by other children'). Goossens et al. (2006) reported these scales to have satisfactory internal consistency, with Cronbach's coefficient alphas ranging from .84 to .96 as well as moderate test-retest reliabilities over a two-year period, with kappa's ranging from .53 to .74. In the present study Cronbach's alphas were .96 for the *bully* scale, .95 for the *follower* scale, .93 for the *outsider* scale, .88 for the *defender* scale, and .96 for the *victim* scale. Accordingly, continuous scores of children's involvement in bullying were computed by averaging the scores on the items of each scale.

Computing correlations among these five measures of children's bullying-related behavior revealed that bullying and following behavior were highly correlated (r .88, $p < .001$) and that outsider and defender behavior were correlated as well (r .63, $p < .001$). In addition, bullying was negatively related to outsider and defender behavior (rs −.37 and −.21, ps < .001, respectively) and the same was true for following behavior (rs −.42 and −.24 $p < .001$, respectively). Finally, children's following and outsider scores were weakly related to their victimization scores (rs −.16 and .15, ps < .01, respectively). These correlations are similar to those found in previous research (Sutton & Smith, 1999) and they indicate that bullying and following behavior tended to co-occur in children's behavior and that the same was true for outsider and defender behavior.

Desire to be Accepted. To assess children's desire to be accepted by each of their classmates, we asked them to use a five-point rating scale—ranging from 0 (not at all) to 4 (very very much)—to answer the following question about each classmate: 'How important do you consider it to be that [name classmate] likes you?' After having answered this question for each classmate, children used the same rating scale to answer a second question, that is: 'Suppose you notice that [name classmate] doesn't like you. How bad would you feel about that?' To assess the correspondence between these two types of ratings, the ratings that each child gave to his or her classmates were correlated. This correlation could not be computed for eight children because they did not differentiate among their classmates for one or both measures. For the 370 children for whom the correlation could be computed, the correlation ranged from −.32 to 1.00 with the average r being .81. The correlations were significantly positive for 357 children (ps < .05), which constitutes 94 percent of all participants. Accordingly, for the large majority of children both types of

ratings about each classmate were moderately to strongly correlated and they were therefore averaged to yield one single measure of the child's desire to be accepted by that particular classmate.

Subsequently, we computed a measure of the extent to which respondents desired to be accepted by male bullies. This was done by weighting the respondent's desire-to-be-accepted ratings of each male classmate on the basis of those classmates' continuous bully scores, which consisted of the average percentage of children who nominated the classmate across all items representing the bully role. For example, when a respondent rated the intensity of his desire to be accepted by a particular male classmate, named X, as 3, and X's bully score was .15, the respondent's bully-weighted desire-to-be-accepted-by-X was .45. Such weighted desire-to-be-accepted-by-X scores were computed with each boy in the respondent's class in the role of X. Subsequently, these scores were averaged across all Xs to obtain an overall desire-to-be-accepted-by-male-bullies score.

This same procedure was repeated with the male classmates' continuous scores for each of the other bullying roles as the weighting factors, which resulted in indices of the desire to be accepted by male followers, outsiders, defenders, and victims. Subsequently, the same procedure was repeated with the respondent's female classmates as the targets, which resulted in parallel indices of the desire to be accepted by female bullies, followers, outsiders, defenders, and victims.

Received Acceptance. To assess the extent to which children actually were accepted by each of their classmates, we used the procedure that was designed for use with Maassen, Akkermans, and van der Linden's (1996) method for determining children's sociometric status on the basis of continuous ratings, rather than on the basis of 'like most' and 'like least' nominations. Specifically, respondents used a visual analogue of a seven-point rating scale—ranging from –3 (strongly dislike) via 0 (neutral) to +3 (like very much)—to indicate their acceptance of each of their classmates. For the purpose of this study, all ratings were recoded on a 0–6 scale. We subsequently added these ratings to the datafile in such a way that the resulting variables reflected the ratings that each participant *received* from each particular classmate, rather than the ratings that each participant *gave* to each classmate.

Measures of the degree to which respondents were actually accepted by boys and girls with particular roles in bullying, were computed in a similar way as the desire-to-be-accepted measures that were described previously. Specifically, the acceptance rating that a respondent received from a particular male classmate was weighted for that classmate's continuous bully score. For example, when a respondent received an acceptance rating of 5 from a particular boy named X, with X having a bully score of .15, the resulting bully-weighted being-accepted-by-X score was .75. These scores were computed for each male classmate in the respondent's class in the role of X. To obtain an overall measure of the extent to which the respondent was accepted by male bullies, the bully-weighted being-accepted-by-X scores were subsequently averaged across all male Xs in the respondent's class. This same procedure was repeated with the classmates' scores on each of the other bullying roles as the weighting factors, which resulted in measures of the extent to which children were accepted by male followers, outsiders, defenders, and victims. Subsequently, the same procedure was repeated with the respondent's female classmates as the raters, which resulted in parallel measures of the extent to which children were accepted by female bullies, followers, outsiders, defenders, and victims.

Procedure

Children were tested individually in a quiet room in their own school by one of eight female research assistants, who were unfamiliar to them. The procedures that are relevant for the purposes of this study as well as some other procedures, were administered in two different sessions. In the first session, children were first told that all information they gave would remain confidential and would not be passed on to any of their peers. In addition, they were urged not to talk about any aspect of the procedures with any of their peers. To allow us to construct the measures of received acceptance, children were subsequently asked to indicate how much they liked each of their classmates using Maassen et al.'s seven-point rating scale. Children were presented with a roster of the names of all classmates and they indicated their liking or disliking of each classmate using a visual analogue of the seven-point rating scale. The names in the roster were presented in one of four to six random orders to prevent presentation order from affecting the results.

Subsequently, the desired acceptance procedure was introduced by pointing out that the importance that people attach to being liked or disliked by someone else might well depend on who that other person is. Children then received the same roster of classmates and they used the visual analogue of a five-point rating scale to indicate how important they considered it to be to be liked by each particular classmate. Finally, the same roster was presented a third time to let children rate for each classmate how bad they would feel upon discovering that they were not liked by the particular classmate.

In a second individual session that took place within a two-week period from the first session, we administered the nomination procedure. Children were asked to nominate peers (unlimited nominations) who fitted the description of the items. If they did not mention anybody, they were prompted once. Children were allowed to nominate themselves, but these nominations were ignored for the purposes of this study.

Results

Descriptive Statistics and Gender Differences

We first computed descriptive statistics for the measures of children's bullying-related behavior and the measures of the acceptance that children desired and received from classmates with different bullying-related behavioral styles. The resulting means, as well as the results of a series of *t* tests that were carried out to examine whether or not there were gender differences, are presented in Table 1.

As can be seen in Table 1, boys showed significantly more bullying and following behavior than girls, and girls were nominated more often as victims. These findings are fully consistent with the findings of another recent study of bullying among Dutch children (Veenstra et al., 2005). In addition, when compared to boys, girls showed significantly more outsider and defender behavior than boys, which is also consistent with previous research (Salmivalli et al., 1996, 1998). Children's scores for the desired and received acceptance from boys were higher for boys than for girls, and the scores for the desired and received acceptance from girls were higher for girls than for boys. Accordingly, children generally desired and received more acceptance from same-sex classmates than from other-sex classmates, which is fully in line with earlier reports about the gender segregation among early adolescents (Maccoby, 2000).

Table 1. Descriptive Statistics for the Raw Bullying-Related Behavior Scores and the Measures of Desired and Received Acceptance

	Boys	Girls	*t* (376)
Behavior scores			
Bully	.08 (.11)	.02 (.05)	5.93***
Follower	.08 (.09)	.02 (.04)	8.15***
Outsider	.05 (.06)	.11 (.10)	−7.21***
Defender	.03 (.03)	.11 (.09)	−10.60***
Victim	.05 (.12)	.08 (.12)	−2.12*
Desired acceptance			
from male bullies	.15 (.09)	.11 (.07)	4.57***
from male followers	.15 (.10)	.11 (.07)	5.22***
from male outsiders	.10 (.06)	.06 (.05)	6.95***
from male defenders	.07 (.04)	.04 (.03)	7.20***
from male victims	.06 (.05)	.04 (.04)	5.67***
from female bullies	.03 (.03)	.05 (.04)	−5.07***
from female followers	.03 (.03)	.05 (.04)	−4.76***
from female outsiders	.12 (.08)	.26 (.11)	−13.57***
from female defenders	.13 (.10)	.25 (.13)	− 9.96***
from female victims	.08 (.07)	.15 (.10)	−8.35***
Received acceptance			
from male bullies	.35 (.17)	.32 (.13)	2.12*
from male followers	.36 (.19)	.33 (.15)	2.08*
from male outsiders	.23 (.11)	.18 (.08)	5.23***
from male defenders	.14 (.08)	.11 (.06)	4.73***
from male victims	.22 (.12)	.18 (.11)	3.14**
from female bullies	.08 (.08)	.11 (.08)	−3.25**
from female followers	.08 (.08)	.11 (.09)	−3.05**
from female outsiders	.39 (.13)	.53 (.14)	−10.79***
from female defenders	.39 (.16)	.50 (.17)	−6.66***
from female victims	.29 (.16)	.38 (.20)	−5.22***

Note: Standard deviations are presented in parentheses.
* $p < .05$; ** $p < .01$; *** $p < .001$.

Main Analyses

As was pointed out in the Introduction section, separate series of hierarchical regression analyses were conducted for each gender group to examine how the received and desired acceptance scores are related to children's involvement in bullying. Children's scores on each of the five bullying role dimensions served as the to-be-predicted criteria and the gender-specific scores of the acceptance that they received and desired from classmates with a particular bullying-related behavioral style, served as predictors. To keep class-related variance from affecting the results, all these measures were ranked and normalized per class using the Rankit procedure that is available in the

SPSS statistical package. This procedure has been used before in research using continuous scores based on peer nominations (Salmivalli et al., 1998).

To avoid collinearity problems, these analyses were carried out successively with the measures of the acceptance that children received and desired from classmates with each of the five bullying-related behavioral styles as the predictors. Preliminary analyses revealed that the results that were obtained with the measures of the desired and received acceptance from bullying children were virtually identical to those obtained with the corresponding measures of the desired and received acceptance from following children. In addition, the results that were obtained when predicting children's bullying behavior were very similar to those obtained when predicting their following behavior. To save space, we will therefore only report analyses using an aggregate measure of the desired and received acceptance from bully/followers that was obtained by averaging both types of predictor measures. In addition, when predicting children's bullying and following behavior we used an aggregate dependent variable that consisted of the average of children's bullying and following scores.

To test our hypothesis that desired acceptance explains variance in behavior over and above the variance that can be explained on the basis of received acceptance, all regression analyses were carried out in two steps. In the first step, we entered the measures of the acceptance that children received from boys and girls with a particular bullying-related behavioral style, followed in the second step by the measures of the acceptance that children desired from boys and girls with that same bullying-related behavioral style.

As an additional first-step predictor, we also included children's relative age, that is, the difference in months between their own age and the average age of all children in their class. Relative age was included because the eldest children—and especially the eldest boys—in a class might have a higher chance of being a bully because their generally stronger physiques provide them with better chances of success. As a consequence, any findings of a relation between bullying and children's desired or received acceptance from other bullying children, would be ambiguous because they could also indicate that, within a class, children of the same age desire and receive each other's acceptance. Including relative age as a predictor enabled us to control for such an effect.

When presenting the results of these analyses, we will focus on (1) whether or not the first-step model, including received acceptance and relative age significantly predicts the criterion behavior and (2) whether or not adding the desired acceptance measures as predictor variables in the second step significantly improves the predictive power of the model. The presentation and discussion of the statistics for individual predictor variables will be restricted to those included in the most complex model that involved a significant improvement in predictive power (further referred to as the *final model*).

Predicting Boys' Bullying/Following Behavior. In all four analyses with boys' bullying/following behavior as the criterion behavior (see Table 2) the first model with relative age and the received acceptance measures as the predictors was significant, irrespective of whether or not the acceptance was received from bullies/followers (see the first column of Table 2), outsiders (second column), defenders (third column), or victims (fourth column). Adding the desired acceptance measures in the second step significantly increased the predictive power of the model when the acceptance that was desired from bullies/followers was added and the increase in predictive power was

Table 2. Results of Four Hierarchical Regression Analyses (one per column) in Each of which Boys' (n = 194) Bullying/Following Behavior is Predicted from the Acceptance they Received and Desired from Male and Female Peers Showing One of Four Bullying-Related Behaviors

	Behavior of Peers whose Acceptance is Received or Desired			
	Bullying/ following	Outsider	Defending	Victimized
Step 1				
Δ R^2	.08***	.09***	.11***	.15***
F (3, 190)	5.66***	6.14***	7.66***	11.25***
Step 2				
Δ R^2	.05**	.03†	.00	.02
F (5, 188)	5.84***	4.83***	—	—
ßs of final model				
Relative age	.16*	.18*	.18**	.19**
Received from [. . .]† boys	−.35***	−.06	−.27***	−.29***
Received from [. . .] girls	.06	−.21*	−.02	−.11
Desired from [. . .] boys	.29**	−.19*	—	—
Desired from [. . .] girls	−.08	.06	—	—

† When interpreting an entry in a data column, please insert the heading of the particular column between the square brackets.
* $p < .05$; ** $p < .01$; *** $p < .001$.

marginally significant when the acceptance that was desired from outsiders was added to the model. Including the acceptance that boys desired from defending and victimized children of both gender groups did not increase the predictive power of the model, indicating that boys' bullying/following behavior was unrelated to their desire to be accepted by these children. Accordingly, the second-step model including desired acceptance was accepted as the final model in the analysis with the measures of acceptance from bullies/followers as predictors and in the analysis, with the measures of acceptance from outsiders as predictors. In the other analyses, only the first-step model, with relative age and received acceptance as the predictors, was taken as the final model. An overview of the β statistics of the final models is presented in the lower part of Table 2.

Inspection of the β weights of the relative age and received acceptance predictors, reveals that boys' bullying/following behavior was positively related to their relative age and negatively to the acceptance they received from bullying/following, defending and victimized boys, as well as to the acceptance they received from female outsiders. Accordingly, the more a boy behaved as a bully/follower, the more his age exceeded that of his classmates and the less he was accepted by most other boys—including those behaving as bullies and followers themselves—as well as by girls showing outsider behavior.

Inspection of the β weights of the desired acceptance predictors reveals that boys' bullying/following behavior was positively related to a desire to be accepted by same-sex bullies/followers, and negatively to a desire to be accepted by boys behaving as outsiders. Accordingly, the more bullying/following behavior a boy showed, the more he desired to be accepted by other male bullies and followers and the less he desired to be accepted by male outsiders. These findings support our first hypothesis.

Inspection of Table 2 further reveals that boys' bullying/following behavior could not be predicted on the basis of the acceptance they desired from girls, irrespective of the girls' behavioral styles. Accordingly, the findings for boys do not support our hypothesis that bullying/following behavior is related to children's desire to be accepted by members of the other sex.

Predicting Girls' Bullying/Following Behavior. The first-step model with relative age and the received acceptance measures as the predictors, significantly predicted girls' bullying/following behavior, irrespective of the behavioral style of the children who generated the acceptance ratings (see Table 3, upper two lines of all four columns). As can be seen in the third and fourth lines of Table 3, adding the desired acceptance measures in the second step significantly increased the predictive power of the model in all four analyses, again irrespective of the behavioral style of the children whose

Table 3. Results of Four Hierarchical Regression Analyses (one per column) In Each of Which Girls' ($n = 184$) Bullying/Following Behavior is Predicted from the Acceptance they Received and Desired from Male and Female Peers Showing One of Four Bullying-Related Behaviors

	Behavior of Peers whose Acceptance is Received or Desired			
	Bullying/ following	Outsider	Defender	Victim
Step 1				
Δ R^2	.25***	.08**	.12***	.12***
F (3, 180)	21.27***	4.96**	8.26***	7.97***
Step 2				
Δ R^2	.04**	.06**	.08***	.04*
F (5, 178)	15.33***	5.63***	8.68***	6.78***
ßs of final model				
Relative age	.03	.10	.08	.07
Received from [. . .][†] boys	.13[a]	−.18*	−.10	−.07
Received from [. . .] girls	−.49***	−.16*	−.24**	−.24**
Desired from [. . .] boys	.23**	.24**	.31***	.16*
Desired from [. . .] girls	−.03	−.26**	−.25**	−.21**

[a] When interpreting an entry in a data column, please insert the heading of the particular column between the square brackets.
* $p < .05$, ** $p < .01$, *** $p < .001$, [†] $p < .10$.

acceptance was desired. Based on these results, the models including desired acceptance were treated as the final model for all four analyses. An overview of the β statistics of these final models is presented in the lower part of Table 3.

Inspection of the β weights reveals that girls' bullying/following behavior was negatively related to the acceptance they received from other girls, irrespective of these other girls' behavioral styles. In addition, girls' bullying/following behavior was also negatively related to the acceptance that they received from boys showing outsider behavior. Finally, girls' bullying/following behavior was positively related to the acceptance they received from bullying/following boys, although this relation was only marginally significant.

More importantly, girls' bullying/following behavior was unrelated to the acceptance they desired from female bully/followers, which does not support our first hypothesis. However, the same behavior was related positively to the acceptance girls' desired from boys, and this remained true irrespective of which type of male bullying-related behavior was used to weigh the girls' ratings of the acceptance they desired from boys. Accordingly, girls' bullying/following behavior was positively related to their desire to be accepted by boys in general, which is in line with our second hypothesis. Finally, girls' bullying/following behavior was related negatively to the acceptance they desired from victimized girls and from girls showing outsider and defender behavior. In sum, the more a girl showed bullying/following behavior, the more she desired to be accepted by boys, the less she desired to be accepted by non-bullying girls, and the less she actually was accepted by girls in general and by outsider boys.

As was pointed out in the Introduction section, our motivational account implies that bullying and following behavior is related to desired acceptance in an unique way. Given the results that were described previously, this implies that it should not be the case that boys' outsider, defender, and victimization scores are also related positively to their desire to be accepted by male bully/followers and that girls' outsider, defender, and victimization scores are also related positively to their desire to be accepted by boys. To examine this issue with respect to boys, we now turn to analyses of whether or not boys' scores on these three measures can be predicted from the accepted and desired acceptance measures.

Predicting Boys' Non-Bullying Behaviors. The analysis of boys' outsider behavior (see Table 4, upper panel) revealed that the first model with relative age and received acceptance significantly predicted this behavior only when the acceptance received from victimized children was taken into account (Table 4, upper two lines of the fourth column). In addition, a marginally significant prediction was obtained when measures of the acceptance received from children behaving as outsiders were taken into account (Table 4, upper two lines of the second column). Adding the desired acceptance measures only increased the predictive power of the model when the acceptance desired from bullies/followers was added as a predictor. Finally, outsider behavior could not be predicted at all from the acceptance received or desired from children showing defender behavior.

Accordingly, the first-step model including relative age and received acceptance was treated as the final model in the analyses in which outsider behavior was predicted on the basis of the acceptance from victimized children and from other children showing outsider behavior. The second-step model including desired acceptance was treated as the final model when predicting outsider behavior on the basis of the measures of

Table 4. Results of 12 Hierarchical Regression Analyses in which Boys' ($n = 194$) Outsider, Defender, and Victimization Scores are Predicted from the Acceptance they Received and Desired from Male and Female Peers Showing One of Four Bullying-related Behaviors

	Behavior of Peers whose Acceptance is Received or Desired			
Criterion behavior	Bullying/ following	Outsider	Defender	Victim
Outsider				
Step 1				
ΔR^2	.03	.04†	.03	.08***
F (3, 190)	—	2.39†	—	5.83***
Step 2				
ΔR^2	.04*	.02	.00	.01
F (5, 188)	2.82*	—	—	—
βs of final model				
Relative age	−.11	−.14*	—	−.14*
Received from [. . .]† boys	.18*	−.08	—	.26***
Received from [. . .] girls	−.05	.15†	—	−.00
Desired from [. . .] boys	−.19*	—	—	—
Desired from [. . .] girls	−.06	—	—	—
Defending				
Step 1				
ΔR^2	.02	.04†	.05*	.05*
F (3, 190)	—	2.34†	3.23*	3.49*
Step 2				
ΔR^2	.01	.00	.00	.00
F (5, 188)	—	—	—	—
βs of final model				
Relative age	—	.05	.04	.05
Received from [. . .]a boys	—	.01	−.15*	.20**
Received from [. . .] girls	—	.18*	.21**	.06
Desired from [. . .] boys	—	—	—	—
Desired from [. . .] girls	—	—	—	—
Being victimized				
Step 1				
ΔR^2	.35***	.38***	.34***	.33***
F (3, 190)	34.52***	38.91***	32.40***	31.20***
Step 2				
ΔR^2	.06***	.00	.01	.01
F (5, 188)	25.93***	—	—	—
Bs of final model				
Relative age	−.01	−.04	−.04	−.04

Table 4. ***Continued***

	Behavior of Peers whose Acceptance is Received or Desired			
	Bullying/ following	Outsider	Defender	Victim
Received from [. . .] boys	−.28***	−.35***	−.32***	−.38***
Received from [. . .] girls	−.41***	−.38***	−.38***	−.32***
Desired from [. . .] boys	−.28***	—	—	—
Desired from [. . .] girls	.27***	—	—	—

[a] When interpreting an entry in a data column, please insert the heading of the particular column between the square brackets.
* $p < .05$; ** $p < .01$; *** $p < .001$, † $p < .10$.

acceptance from bullying/following children. An overview of the β statistics for the final models is presented in the lower part of the first panel of Table 4.

Inspection of these statistics reveals that boys' outsider behavior was related to being relatively young, to being accepted both by bullying/following and victimized boys, and to a definite lack of desire to be accepted by bullying/following boys. Accordingly, the more a boy behaved as an outsider, the younger he was when compared to his classmates, the more he was accepted by male bullies/followers and victims, and the less he desired to be accepted by male bullies/followers.

As can be seen in the middle panel of Table 4, boys' defender behavior could be predicted significantly on the basis of the measures of acceptance received from other defenders and victims and marginally significantly on the basis of the measures of acceptance received from outsiders. Adding the desired acceptance measures in no case increased the predictive power of the model, indicating that boys' defender behavior was unrelated to any of the desired acceptance measures. Accordingly, the first-step models including received acceptance from outsiders, defenders, and victims were treated as the final models. As is clear from inspecting the β weights, boys' defender scores were positively related to being accepted by female outsiders and defenders and by male victims, but negatively to being accepted by male defenders. Accordingly, the more a boy behaved as a defender, the more he was accepted by male victims and by female defenders, but the less he was accepted by other male defenders.

Finally, as can be seen in the bottom panel of Table 4, boys' victimization scores could be predicted from all types of received acceptance measures, irrespective of which of the classmates' bullying-related behaviors was used to weigh their acceptance ratings. Adding the desired acceptance measures to the model only increased the model's predictive power when the acceptance desired from bullies/followers was added to the model.

As is clear from inspecting the β weights in the lower part of the bottom panel of Table 4, being victimized was negatively related to all received acceptance measures, irrespective of the behavioral style or the gender of the children who generated the acceptance ratings. In addition, being victimized was negatively related to boys' desire

to be accepted by bullying/following boys, but positively to their desire to be accepted by bullying girls. Accordingly, the more a boy was victimized, the less acceptance he received from children in general, the less he desired to be accepted by bullying boys, and the more he desired to be accepted by bullying girls.

In sum, the analyses with boys' non-bullying behaviors as the criterion variables indicate that their outsider, defender, and victim scores were predicted by quite different patterns of received and desired acceptance than their bullying/following behavior, which provides further support to our first hypothesis. We now turn to the analyses of girls' outsider, defender, and victimization scores.

Predicting Girls' Outsider and Defender Behavior and their Victimization Scores. Girls' outsider behavior could be predicted significantly on the basis of the first-step model with relative age and the received acceptance measures as the predictors, irrespective of which of the raters' bullying-related behaviors was used to weigh the acceptance ratings (see Table 5, upper lines of all four columns). Adding the desired acceptance measures in the second step increased the predictive power of the model in all analyses, again irrespective of which of the target children's bullying related behaviors was used to weigh the desired acceptance ratings. Based on these results, the models including desired acceptance were treated as the final model for all analyses on girls' outsider scores (see the upper panel of Table 5).

As can be seen in Table 5 (upper panel), girls' outsider behavior was related to being relatively young and to being accepted by boys showing outsider and defender behavior, by bullying girls, and by victimized girls. In addition, girls' outsider behavior was related positively to their desire to be accepted by all girls except those showing bullying/following behavior and negatively to their desire to be accepted by boys, even though the relation with their desire to be accepted by victimized boys was insignificant. In sum, the more girls exhibited outsider behavior, (1) the more they were accepted by bullying girls, by victimized girls, by defending boys, and by boys showing outsider behavior, (2) the more they desired to be accepted by non-bullying girls, and (3) the less they desired to be accepted by boys.

We now turn to the analysis of girls' defender behavior. As can be seen in the middle panel of Table 5, this behavior could be predicted significantly based on the first-step model with relative age and the received acceptance measures as the predictors, and this remained true irrespective of which of the raters' bullying-related behaviors was used to weigh the acceptance ratings that girls received. Adding the desired acceptance measures in the second step in no case increased the predictive power of the model. Based on these results, the first-step models including relative age and received acceptance were accepted as the final models for all analyses on girls' defender scores.

As is clear from the lower part of the middle panel of Table 5, girls' defender scores were positively related to the acceptance they received from male bullies/followers, outsiders, and defenders, and from female bullies/followers, victims, and outsiders, even though the latter relation was only marginally significant. Accordingly, among girls, defending behavior was positively related to being accepted by children with other behavioral styles, including those who behaved antisocially. In contrast, girls' desire to be accepted by other children did not explain additional variance in their defending behavior.

The analyses on girls' victimization scores revealed that these scores could be predicted significantly based on the first-step model with relative age and the received acceptance measures as the predictors, irrespective of which of the raters'

Table 5. Results of 12 Hierarchical Regression Analyses in which Girls' ($n = 184$) Outsider, Defender, and Victimization Scores are Predicted From the Acceptance they Received and Desired from Male and Female Peers Showing One of Four Bullying-related Behaviors

	Behavior of Peers whose Acceptance is Received or Desired			
Criterion behavior	Bullying/ following	Outsider	Defender	Victim
Outsider				
Step 1				
Δ R^2	.21***	.11***	.10***	.19**
F (3, 180)	16.37***	7.53***	6.70***	13.84***
Step 2				
Δ R^2	.03*	.04*	.06**	.03*
F (5, 178)	11.39***	6.39***	6.66***	9.79***
βs of final model				
Relative age	−.21**	−.26***	−.25***	−.23***
Received from [. . .][†] boys	−.08	.31***	.25**	.07
Received from [. . .] girls	.40***	−.12	.01	.27***
Desired from [. . .] boys	−.17*	−.21*	−.27***	−.11
Desired from [. . .] girls	−.03	.20*	.21*	.18*
Defending				
Step 1				
Δ R^2	.12***	.09***	.09***	.18***
F (3, 180)	8.29***	6.15***	5.61***	13.06***
Step 2				
Δ R^2	.01	.00	.01	.01
F (5, 178)	—	—	—	—
βs of final model				
Relative age	−.08	−.07	−.09	.00
Received from [. . .][a] boys	.16*	.24***	.30***	.04
Received from [. . .] girls	.27***	.13[†]	−.00	.41***
Desired from [. . .] boys	—	—	—	—
Desired from [. . .] girls	—	—	—	—
Being victimized				
Step 1				
Δ R^2	.29***	.23***	.28***	.34***
F (3, 180)	24.45***	17.82***	23.72***	30.99***
Step 2				
Δ R^2	.00	.02	.02*	.02[†]
F (5, 178)	—	—	15.78***	19.89***
Bs of final model				
Relative age	.02	−.04	−.00	−.11[†]

Table 5. ***Continued***

	Behavior of Peers whose Acceptance is Received or Desired			
	Bullying/ following	Outsider	Defender	Victim
Received from [. . .] boys	–.37***	–.36***	–.29***	–.11
Received from [. . .] girls	–.29***	–.22***	–.35***	–.57***
Desired from [. . .] boys	—	—	–.10	–.11†
Desired from [. . .] girls	—	—	.18*	.13†

[a] When interpreting an entry in a data column, please insert the heading of the particular column between the square brackets.
* $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .10$.

bullying-related behaviors was used to weigh their acceptance ratings (see Table 5, bottom panel). Adding the desired acceptance measures in the second step only significantly increased the predictive power of the model when the acceptance desired from defending children was included. A marginally significant increase in predictive power was obtained when the acceptance desired from other victimized children was included. Based on these results, the first-step models with relative age and received acceptance were treated as the final models for the analyses, including the measures of acceptance from children showing bullying/following behavior and from children showing outsider behavior, and the second-step models were treated as the final models for the analyses that included the measures of acceptance from defending children and from victimized children (see Table 5, bottom panel).

As is clear from inspecting the β weights in the lower part of the bottom panel of Table 5, girls' victimization scores were negatively related to being accepted by virtually all children, including girls who were victimized themselves and girls who tended to defend victims. In addition, a significant positive relation was found with girls' desire to be accepted by defending girls. Accordingly, the more a girl was victimized, the less acceptance she received from virtually all children and the more she desired to be accepted by girls showing defending behavior. When taken together, the results for girls' non-bullying behaviors resembled those obtained for the corresponding behaviors among boys in that the analyses of girls' outsider, defender, and victim scores yielded results that were markedly different from those obtained in the analyses of their bullying/following scores. These findings are consistent with our first hypothesis.

Discussion

In the present study we focused on one type of motive to participate in bullying, that is, children's desire to be accepted by particular peers. Our first hypothesis was that children's bullying behavior would be positively related to their desire to be accepted by other bullying children, while being unrelated or negatively related to their desire to be accepted by non-bullying children. As was clear from the regression analyses on

children's bullying/following behavior, these predictions were borne out for boys, but not for girls.

These findings raise the issue of why boys', but not girls', bullying/following behavior was related to their desire to be accepted by same-sex children with the same behavioral style. It is important to note that girls' bullying/following behavior was related to their desire to be accepted by bullying/following boys, and also their desire to be accepted by other boys. These findings suggest that our first hypothesis might actually be valid for girls as well as for boys, but with the qualification that for antisocial girls the target of their need to belong consists of antisocial boys, rather than of other antisocial girls. This interpretation suggests that girls' bullying/following behavior might be related more strongly to their desire to be accepted by boys showing bullying/following behavior than to their desire to be accepted by non-bullying boys. The regression analyses that were reported in Table 3 are uninformative in this respect because each of the behavioral-style-specific acceptance measures was entered in a separate regression analysis. Accordingly, to address this issue, we computed additional Pearson product moment correlations between girls' bullying/following behavior and their desire to be accepted by boys with different bullying-related behavioral styles.

The correlations between girls' bullying/following behavior and their desire to be accepted by boys who were nominated as bullies/followers, defenders, outsiders, and victims were .26 ($p = .001$), .23 ($p < .01$), .13 ($p < .10$), and .11 (NS), respectively. Subsequent tests of whether or not the differences between these correlations were significant revealed that girls' bullying/following behavior was significantly more strongly related to their desire to be accepted by boys showing bully/follower behavior than to their desire to be accepted by boys showing outsider behavior and by victimized boys. Accordingly, even though girls' bullying/following behavior was related positively to their desire to be accepted by boys in general, the relations were strongest with their desire to be accepted by bullying/following boys. Although these results were not predicted, they are in line with findings in criminology that criminal behavior in both males and females is most heavily influenced by male friends (Gifford-Smith, Dodge, Dishion, & McCord, 2005).

According to our motivational interpretation of these findings, particular children's desire to be accepted by bullying children motivates them to behave in similar ways in order to elicit the bullies' acceptance. As was pointed out in the Introduction section, this implies that these children implicitly or explicitly assume that behaving as a bully will increase their chances of being accepted by other bullying children. Our data provided only limited support for this assumption. On the positive side, there was a marginally significant positive relation between girls' bullying/following behavior and the acceptance they received from bullying/following boys, which is consistent with the assumption. On the negative side, boys' bullying/following behavior—even though positively related to a desire to be accepted by other bullying/following boys—actually was negatively related to actually being accepted by these same boys, which obviously is inconsistent with the assumption. When taken together, our data suggest that using bullying to elicit other bullying children's acceptance is not necessarily a successful strategy.

Our second hypothesis was that bullying behavior would be related positively to children's desire to be accepted by members of the other sex. As was clear from the regression analyses on bullying/following behavior, these predictions were borne out for girls, but not for boys. The more bullying/following behavior girls exhibited, the

more they desired to be accepted by boys and this was true even when controlling for the acceptance that girls actually received from boys. As was discussed previously, girls' bullying/following behavior was most strongly related to their desire to be accepted by bullying/following boys. However, when seen from the perspective of our second hypothesis, the finding that girls' bullying/following behavior was also related to their desire to be accepted by non-bullying boys is particularly important because it suggests that bullying among girls is not only a corollary of desiring to be accepted by antisocial boys, but also of a more general desire to get access to the other sex, which is in line with our second hypothesis. That the predicted relations were found for girls might only be due to the fact that girls in the 10–13 age range are likely to be well in advance of boys in terms of pubertal status (Tanner, 1990), which might lead them to be more interested in the other sex than boys of the same age.

It could be argued that the previously mentioned account is compromised because children's ratings of the importance of being accepted by each particular classmate do not necessarily reflect a need to belong. A child's desire to be accepted by a particular bully might, for example, also result from the child taking precautions out of fear of becoming that bully's next victim. Both victims and outsiders could be expected to take such precautions, although outsiders with more apparent success than victims. This interpretation would lead one to expect that the acceptance that children desire from same-sex bullying/following children should be related positively to their outsider scores and possibly also to their victimization scores. However, as is clear from Tables 4 and 5, all the relevant relations were either non-existent or significantly negative. Accordingly, a desire to be accepted by bullying/following children was definitely not characteristic of outsiders and victims, which, in turn, suggests that such a desire is unlikely to reflect children's fears of being bullied.

In the Introduction section, we justified the use of continuous measures of children's bullying-related behavior by arguing that it would be unwise to *a priori* ignore some of the variance in children's behavior by classifying them into bullying role categories. Nevertheless, we acknowledge that the study's variable-centered approach still shares a limitation with previously used classification procedures (Goossens et al., 2006; Salmivalli et al., 1996, 1998; Sutton & Smith, 1999), that is, that it was ignored that many children may have received nominations for several types of bullying-related behavior. Based on the correlations between the measures of bullying-related behavior that were reported in the Method section, it could be argued that the assessment of children's involvement in bullying in the present study should have been based on the full profile of the nominations that children received. For example, children who are nominated as a bully but to some extent also as a follower or even as a victim, might well show a different pattern of desired and received acceptance when compared to initiators of bullying, who receive few nominations for any other type of involvement in bullying. One way to examine whether or not such distinctions would affect the presently obtained results would be to classify children on the basis of the full profile of their scores on each of the dimensions—for example, by using cluster analysis—and to subsequently use the resulting classification as the basis for computing the measures of desired and received acceptance. In the present study, we refrained from using such an approach because of the difficulties that are inherent in the use of inductive classification procedures like cluster analysis. However, once future studies have established the reliability and validity of inductively obtained classifications by using sufficiently large datasets, it would be worthwhile to conceptually replicate the present study on the basis of such classifications.

The present findings differed considerably depending on whether or not the focus was on the acceptance children desired from same-sex classmates or on the acceptance they desired from other-sex classmates. For example, whereas boys' behavior was differentially related to the acceptance they desired from other boys with particular behavioral styles, very few relations were found with the acceptance they desired from girls, irrespective of these girls' behavioral style. Among girls, even the sign of some significant relations between their behavior and how much they desired to be accepted by particular other children depended on whether or not the acceptance was desired from girls or from boys. For example, female outsider behavior was positively related to the acceptance desired from other girls showing outsider or defender behavior, but negatively to the acceptance desired from boys showing that same behavior (see Table 5 upper panel). When taken together, these findings provide strong support for Gifford-Smith and Brownell's (2003) plea that gender should be taken into account in peer relations research.

Finally, our finding that children's desire to be accepted by particular other children explained variance in their antisocial involvement in bullying supports Baumeister and Leary's (1995) suggestion that the need to belong can motivate antisocial behavior. The finding that boys' and girls' desire to be accepted by antisocial boys is related to their own antisocial behavior further suggests that one source of individual differences in children's susceptibility to negative peer influence is which other children they choose as the target for their need to belong. The cross-sectional design of the present study prevents strong conclusions with respect to causality, but future longitudinal research could be used to sort out whether or not children's need to belong can actually lead them to behave antisocially.

References

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529.

Byrne, D., Clore, G., & Smeaton, G. (1986). The attraction hypothesis: Do similar attitudes affect anything? *Journal of Personality and Social Psychology*, *51*, 1167–1170.

Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, H. D., & Gariepy, J. L. (1988). Social networks and aggressive behavior: Peer support or peer rejection. *Developmental Psychology*, *24*, 815–823.

Camodeca, M., & Goossens, F. A. (2005). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology and Psychiatry*, *46*, 186–197.

Camodeca, M., Goossens, F. A., Meerum Terwogt, M., & Schuengel, C. (2002). Bullying and victimization among school-age children: Stability and links to proactive and reactive aggression. *Social Development*, *11*, 332–345.

Camodeca, M., Goossens, F. A., Schuengel, C., & Meerum Terwogt, M. (2003). Links between social information processing in middle childhood and involvement in bullying. *Aggressive Behavior*, *29*, 116–127.

Farmer, T. W., Leung, M. C., Pearl, R., Rodkin, P. C., Cadwallader, T. W., & Van Acker, R. (2002). Deviant or diverse peer groups? The peer affiliations of aggressive elementary students. *Journal of Educational Psychology*, *94*, 611–620.

Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, *41*, 235–284.

Gifford-Smith, M., Dodge, K. A., Dishion, T. J., & McCord, J. (2005). Peer influence in children and adolescents: Crossing the bridge from developmental to intervention science. *Journal of Abnormal Child Psychology*, *33*, 255–265.

Goossens, F. A., Olthof, T., & Dekker, P. (2006). The New Participant Role Scales: A comparison between various criteria for assigning roles and indications for their validity. *Aggressive Behavior*, *32*, 343–357.

Hartup, W. W. (2005). Peer interaction: What causes what? *Journal of Abnormal Child Psychology*, *33*, 387–394.
Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, *41*, 441–455.
Hawkins, D. L., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development*, *10*, 512–527.
Hawley, P. H. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted Machiavellian. *Merril-Palmer Quarterly*, *49*, 279–309.
Hektner, J. M., August, G. J., & Realmuto, G. M. (2000). Patterns and temporal changes in peer affiliation among aggressive and nonaggressive children participating in a summer school program. *Journal of Clinical Child Psychology*, *29*, 603–614.
Hodges, E. V. E., Malone, M. J., & Perry, D. G. (1997). Individual risk and social risk as interacting determinants of victimization in the peer group. *Developmental Psychology*, *33*, 1032–1039.
Honneth, A. (1995). *The struggle for recognition: The moral grammar of social conflicts*. Cambridge, MA: Polity Press.
Kochenderfer, B. J., & Ladd, G. W. (1997). Victimized children's responses to peers' aggression: Behaviors associated with reduced versus continued victimization. *Development and Psychopathology*, *9*, 59–73.
Kochenderfer-Ladd, B. (2004). Peer victimization: The role of emotions in adaptive and maladaptive coping. *Social Development*, *13*, 330–349.
Kochenderfer-Ladd, B., & Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology*, *38*, 267–278.
Loeber, R., & Dishion, T. J. (1983). Early predictors of male delinquency: A review. *Psychological Bulletin*, *94*, 68–98.
Maassen, G. H., Akkermans, W., & van der Linden, J. L. (1996). Two-dimensional sociometric status determination with rating scales. *Small Group Research*, *27*, 56–78.
Maccoby, E. (2000). Perspectives on gender development. *International Journal of Behavioral Development*, *24*, 398–406.
Maslow, A. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.
O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Issues and challenges for intervention. *Journal of Adolescence*, *22*, 437–452.
Olweus, D. (1978). *Aggression in the schools: Bullies and whipping boys*. Washington, DC: Hemisphere Press.
Owens, L., Shute, R., & Slee, P. (2003). 'Guess what I just heard!': Indirect aggression among teenage girls in Australia. *Aggressive Behavior*, *26*, 67–83.
Pellegrini, A. D. (2002). Affiliative and aggressive dimensions of dominance and possible functions during early adolescence. *Aggression and Violent Behavior*, *7*, 21–31.
Pellegrini, A. D., & Bartini, M. (2001). Dominance in early adolescent boys: Affiliative and aggressive dimensions and possible functions. *Merril-Palmer Quarterly*, *47*, 142–163.
Perry, D. G., Willard, J. C., & Perry, L. C. (1990). Peers' perceptions of the consequences that victimized children provide aggressors. *Child Development*, *61*, 1310–1325.
Poulin, F., & Boivin, M. (2000). The role of proactive and reactive aggression in the formation and development of boys' friendships. *Developmental Psychology*, *36*, 233–240.
Rigby, K. (2002). Bullying in childhood. In P. K. Smith, & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 549–568). Oxford: Blackwell.
Salmivalli, C., Huttunen, A., & Lagerspetz, K. M. J. (1997). Peer networks and bullying in schools. *Scandinavian Journal of Psychology*, *38*, 305–312.
Salmivalli, C., Lagerspetz, K. M., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, *22*, 1–15.
Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. J. (1998). Stability and change of behavior in connection with bullying in schools: A two-year follow-up. *Aggressive Behavior*, *24*, 205–218.
Sutton, J., & Smith, P. K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behavior*, *25*, 97–111.
Tanner, J. M. (1990). *Foetus into man* (2nd ed.). Cambridge MA: Harvard University Press.

Veenstra, R., Lindenberg, S., Oldehinkel, A. J., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2005). Bullying and victimization in elementary schools: A comparison of bullies, victims, bully/victims, and uninvolved preadolescents. *Developmental Psychology*, *41*, 672–682.

Acknowledgments

We are grateful to the children and schools who participated in this study, to Gerdien Welleman for co-ordinating the data collection, to Meijke Bravenboer, Marjolein Breedijk, Francis Cornelisse, Wanda Koning, Irina Lokhoff, Fieke van Rooyen, and Alice Veluwenkamp for their help in collecting the data, and to Hans Koot for his helpful comments on earlier versions of this paper. Portions of this research were presented at the 2003 Biennial Meeting of the SRCD, April 24–27, 2003, Tampa, FL.